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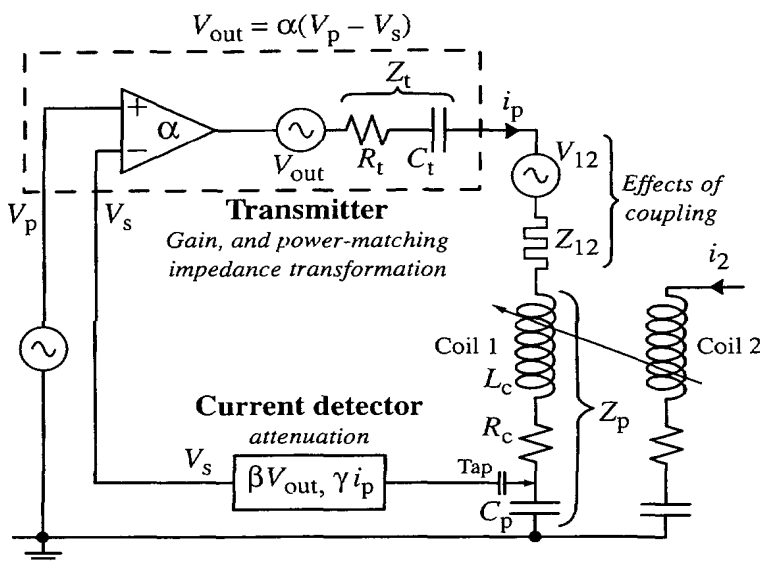
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(54) Title: METHOD OF EFFECTING NUCLEAR MAGNETIC RESONANCE EXPERIMENTS USING CARTESIAN FEED-BACK



(57) Abstract: In nuclear magnetic resonance experiments, Cartesian electronic feedback is used to reduce substantially in transmission and/or reception the deleterious effects of sample-mediated and direct interactions between coils in an array of transmitting and/or receiving coils. The feedback is also used with single or multiple coils to maintain at essentially constant values the relationship between an input transmitter voltage and the magnetic resonance flip angle, and the relationship between transverse nuclear magnetisation and the strength of the free induction decay signal presented by a receiver for analysis, regardless of factors such as sample electrical conductivity.